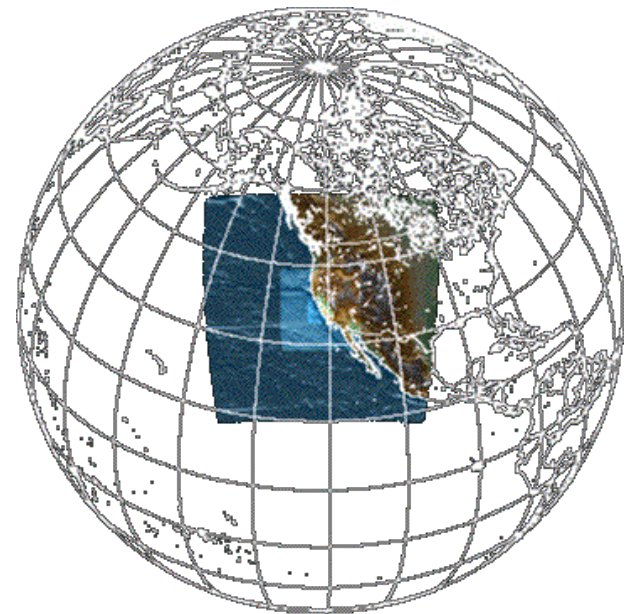


# COAMPS -- On-Scene (OS)



Updated: January 25,  
2001

# Previous Acronyms of the system

STAF-C

DAMPS

TAMS/RT

# Introduction

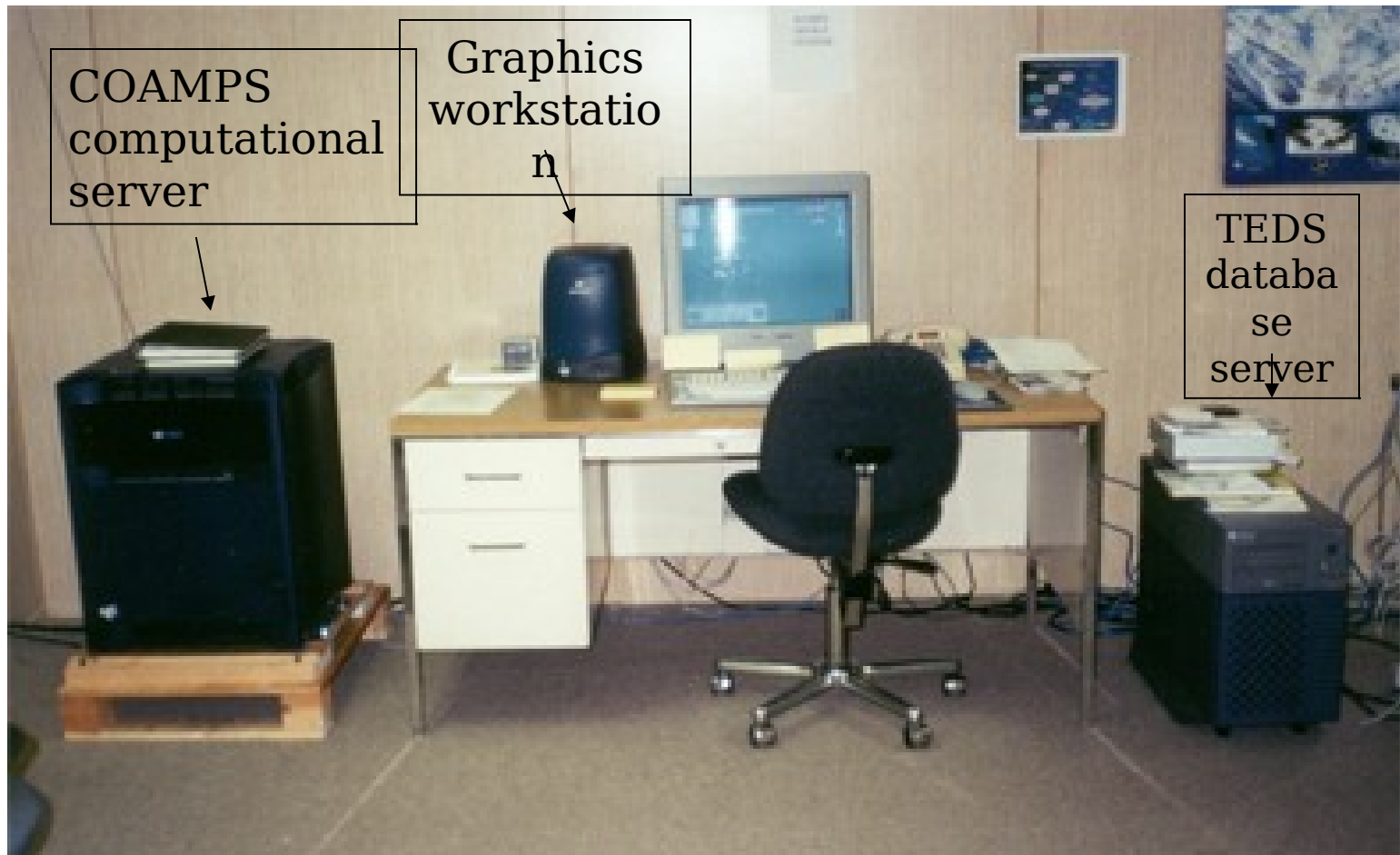
Automated portable atmospheric system. Performs,

- Data assimilation
- Nowcast
- Forecast

# Atmospheric Data Available

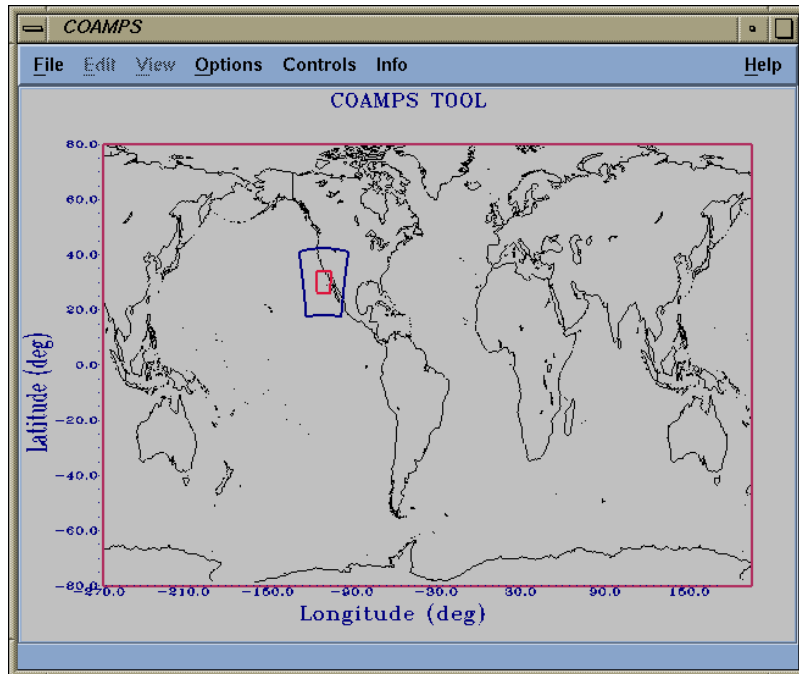
- Uses Large-scale model or mesoscale model gridded data fields as a first guess
    - NOGAPS
    - Its own forecast
  - Augments first guess fields with observations
    - satellite data, etc.
1. Pulls data from FNMOC databases
    - uses FTP and HTTP formats
      - Stores data in database
  2. No tropical Bogus
  3. Ingests --
    - NOGAPS Fields
    - OBS from Metcast,
    - Remote OBS via DPS
    - NO Bogus for tropicals
    - Local Observation
    - Uses CODA anal for sea temp!
    - Uses SFC bottom SST

# Equipment



(Estimated cost -> \$100,000 per unit, not installed)

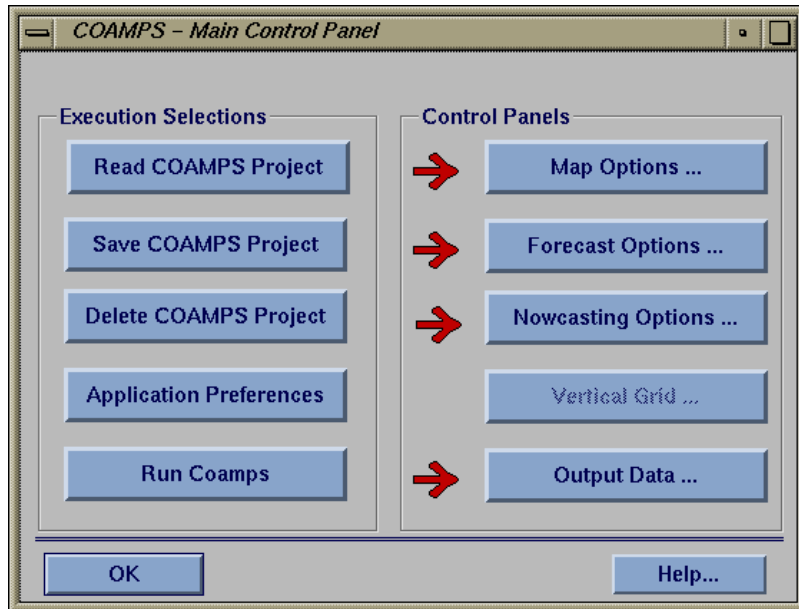
# Area Selection Dialog



- Similar to METCAST selection tools
- Important to understand the influences of the topography
- Place nests over terrain to get effects from it.
  - Don't locate over water only...

# Main Control Panel

- Red arrow indicate information is needed prior to starting run.



# Map Option Control Panel

The screenshot shows the 'COAMPS - Map Options Control Panel' window. It is divided into three main sections: Projection, Grid, and Graphical.

**Projection Section:**

- Map Projection: Lambert Conformal
- Center Latitude for the Coarse Mesh (Deg): [ ] North
- Center Longitude for the Coarse Mesh (Deg): [ ] East
- Standard Latitude 1 of Grid Projection (Deg): 60.00 North
- Standard Latitude 2 of Grid Projection (Deg): 30.00 North

**Grid Section:**

	Number of Grid Points		Grid Spacing (Kilometers)
	X-Axis	Y-Axis	
<input checked="" type="checkbox"/> Coarse Mesh	61	61	45.00
<input checked="" type="checkbox"/> Medium Mesh	61	61	15.00
<input type="checkbox"/> Fine Mesh	[ ]	[ ]	[ ]
<input type="checkbox"/> Inner Mesh	[ ]	[ ]	[ ]

**Graphical Section:**

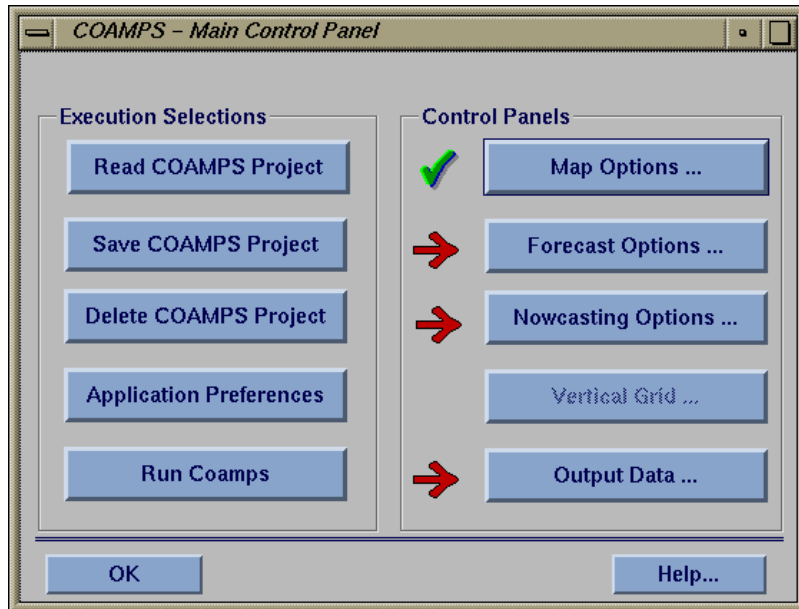
- Zoom Buttons: Zoom In, Zoom Out, Reset
- Mouse Button Features: Center Position of Coarse Mesh, Translate Selected Mesh, Resize Selected Mesh
- Select Mesh to Translate or Resize: Coarse, Medium, Fine, Inner
- Map Projection Options: Load, Advanced Features

At the bottom are buttons for OK, Apply, Home, Cancel, and Help.

- Setup size of nests
- 81km first mess adjusted down to whatever resolution needed
- Smaller the grid spacing gets the quicker the error introduced
  - 10km good for 24 hrs
  -

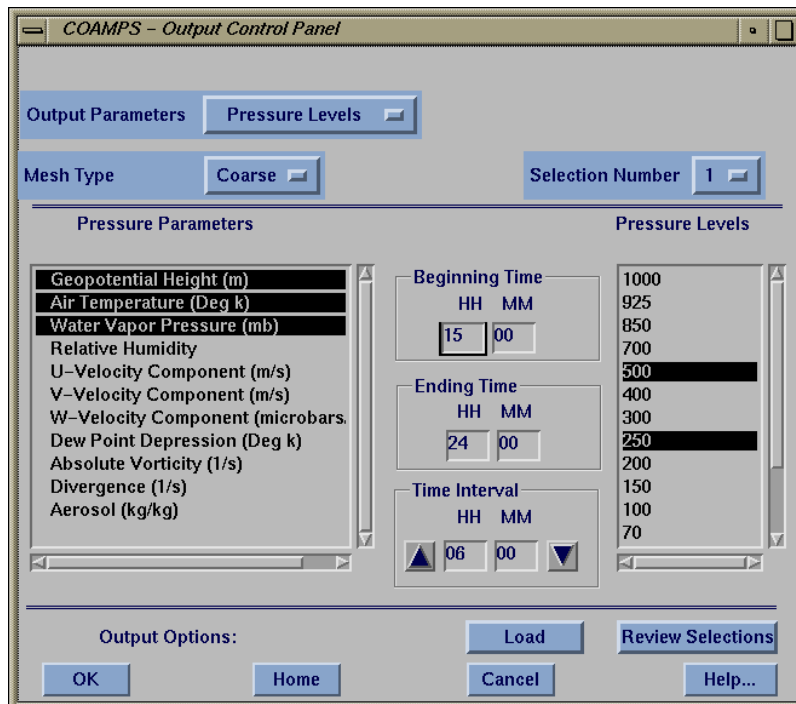


# Map Options – Complete



- Green check means enough information has been entered
- The Map, Forecast, Nowcasting, Vertical Grid, and Output Data must have a green check prior to starting the run.

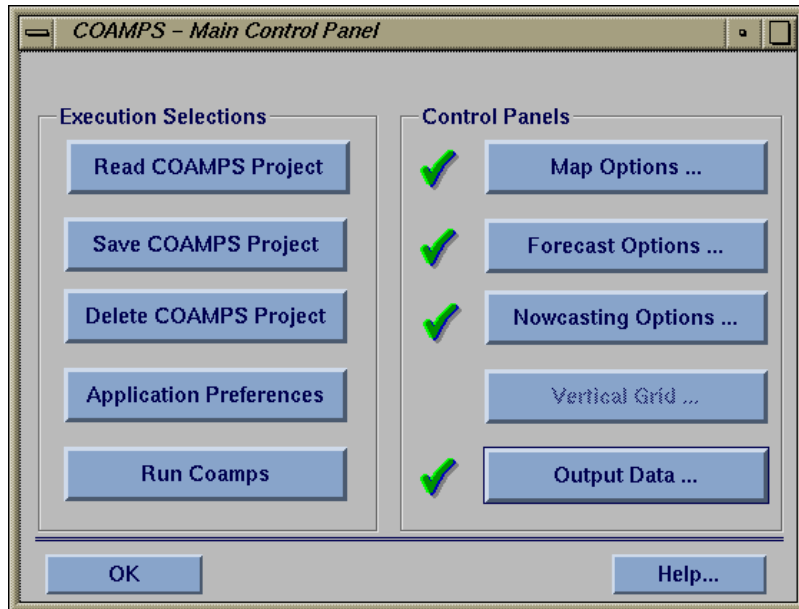
# Output Control Panel



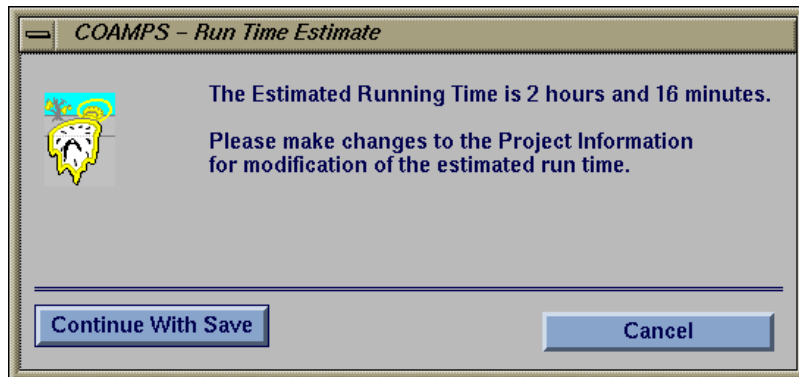
- Understand the products and what parameters go into them.
- A forecaster must know what factors they are going to be looked at?
  - Which products are needed to solve the forecast question.
  - Example
    - TLAM support
    - Icing

# Once Complete...

- The system is ready to begin the COAMPS run!
- How long will it take?



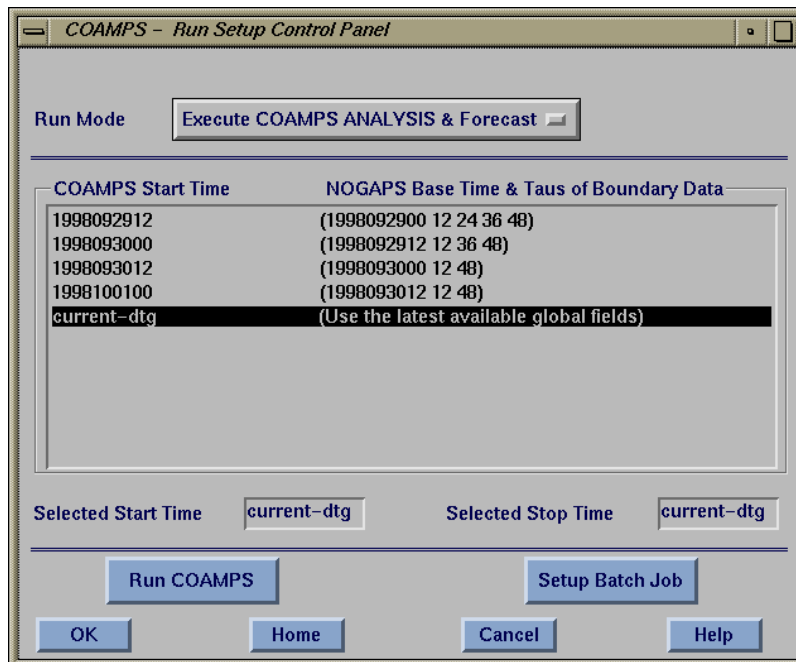
# Run Time Estimate



- Before the run starts the program gives an estimate running time.
- Factors that change the run time length.
  - Resolution
  - Size of area
  - Number of products

# Run Setup Control Panel

- That's it!
- Run COAMPS!



# Important factors to know

- Ability to control if system performs a hot or cold start
- O2 graphics machine is used to create gif images to view the data
  - WXMAP format
  - Holds past history of five days
- With a METCAST server installed it could be view via JMV.
- Products can be meteogram, or mercator (flat)chart
- Has Nowcast Option
  - RUC style of forecasting
  - Anal every hour

# More...

- Could be used to forecast refractivity using tomorrow sounding!
- Can move a project to new area

# References

- STAFC User Manual -- 2 November 1999
  - [http://stratus.nrlmry.navy.mil/mon\\_html/TAMSRT\\_UM/](http://stratus.nrlmry.navy.mil/mon_html/TAMSRT_UM/)